

sub a2

Abstract of the Disclosure

In a spray nozzle (10), a carrier (12) defines a spray aperture (20), a groove (30) surrounding the spray aperture for receiving an o-ring (32), a first locating bore (26) for slidably receiving an orifice plate (14) seated against the o-ring (32) and for aligning the orifice plate with the spray aperture, and a second locating bore (28) for slidably receiving a swirl unit and aligning the swirl unit (16) with the orifice plate and spray aperture. A pair of retaining lugs (34) project inwardly from the carrier (12) a predetermined distance for engaging the upstream end (54) of the swirl unit (16) to thereby retain the swirl unit and orifice plate (14) within the carrier. The swirl unit (16) defines on its peripheral surface a recessed flat (58) which is aligned with the retaining lugs (34) to thereby clear the lugs upon inserting the swirl unit into the carrier (12). An elongated slot (68) is formed on the upstream end of the swirl unit (16) for receiving a screw driver. During assembly, the screw driver is inserted into the slot (68) and used to axially press the swirl unit (16) against the orifice plate (14) and o-ring (32) until the upstream end of the swirl unit clears the retaining lugs (34). Then, the screw driver and swirl unit are rotated about 90° to move the flat (58) out of alignment with the retaining lugs (34), and the screw driver is released to permit the o-ring (32) to expand and in turn move the upstream end of the swirl unit into engagement with the retaining lugs. To complete the assembly, the nozzle body (18) is threadably received within the carrier (12) behind the swirl unit (16) to

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3.0
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H1563371.DOC 05/28/99

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